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Laccolptera (Orphnodella) obscuromaculata, a new species from
Central Africa
(Coleoptera: Chrysomelidae: Cassidinae)

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ABSTRACT. *Laccolptera obscuromaculata*, new species is described from the Democratic Republic of Congo. It belongs to the subgenus *Orphnodella* SPAETH, 1902, the group of species with subtriangular body. It differs from all members of the subgenus in elytra with numerous obscure spots.

Key words: entomology, taxonomy, new species, Coleoptera, Chrysomelidae, Cassidinae, *Laccolptera*, Central Africa.

The genus *Laccolptera* BOHEMAN, 1855 comprises 65 species divided into 10 subgenera distributed in tropical and subtropical parts of the Old World (BOROWIEC 1999, BOROWIEC and ŚWIĘTOJAŃSKA 2010). The most speciose subgenus is *Orphnodella* SPAETH, 1902 with 22 described species, 20 of them known from Africa south of Sahara and two from India. They were revised recently (BOROWIEC 1994, ŚWIĘTOJAŃSKA 2001). Species of the subgenus *Orphnodella* form two groups of different body shape. First group with elongate, almost parallelsided body comprises 10 species (including both species from India), second group with subtriangular body comprises 12 species. In material from Institute Royal des Sciences Naturelles, Bruxelles studied recently I found a series of specimens representing a new species of the subgenus *Orphnodella* of the group with subtriangular body. Its description is given below.

***Laccolptera (Orphnodella) obscuromaculata* n. sp.**

ETYMOLOGY

Named after numerous dark spots spread over the whole elytra.

TYPE MATERIAL

Holotype male: "Coll. I.R.Sc.N.B., Congo (RDC) Mayombe, Bas-Congo, Luki Biosphere res., 5°37'16.7"S 13°05'54.8"E 260 m, 17.IX.2007 canopy fogging, leg. D. De Bakker, J.P. Michiels" (preserved at Institute Royal des Sciences Naturelles, Bruxelles, Belgium); 7 paratypes: the same data; 5 paratypes: the same data but date "23.IX.2007"; one paratype: the same data but date "21.IX.2007"; one paratype: "Coll. I.R.Sc.N.B., Rep. Demo. Congo, Mayombe, Bas-Congo, 5°37'16.7"S/13°05'54.8"E 266 asl, Fog. 5, 13/11/2006, leg. D. De Bakker & J.P. Michiels" (paratypes preserved at Institute Royal des Sciences Naturelles, Bruxelles, Belgium, in collection of the Department of Biodiversity and Evolutionary Taxonomy, University of Wrocław, Poland, and in the collection of Lukas SEKERKA, České Budějovice, Czech Republic).

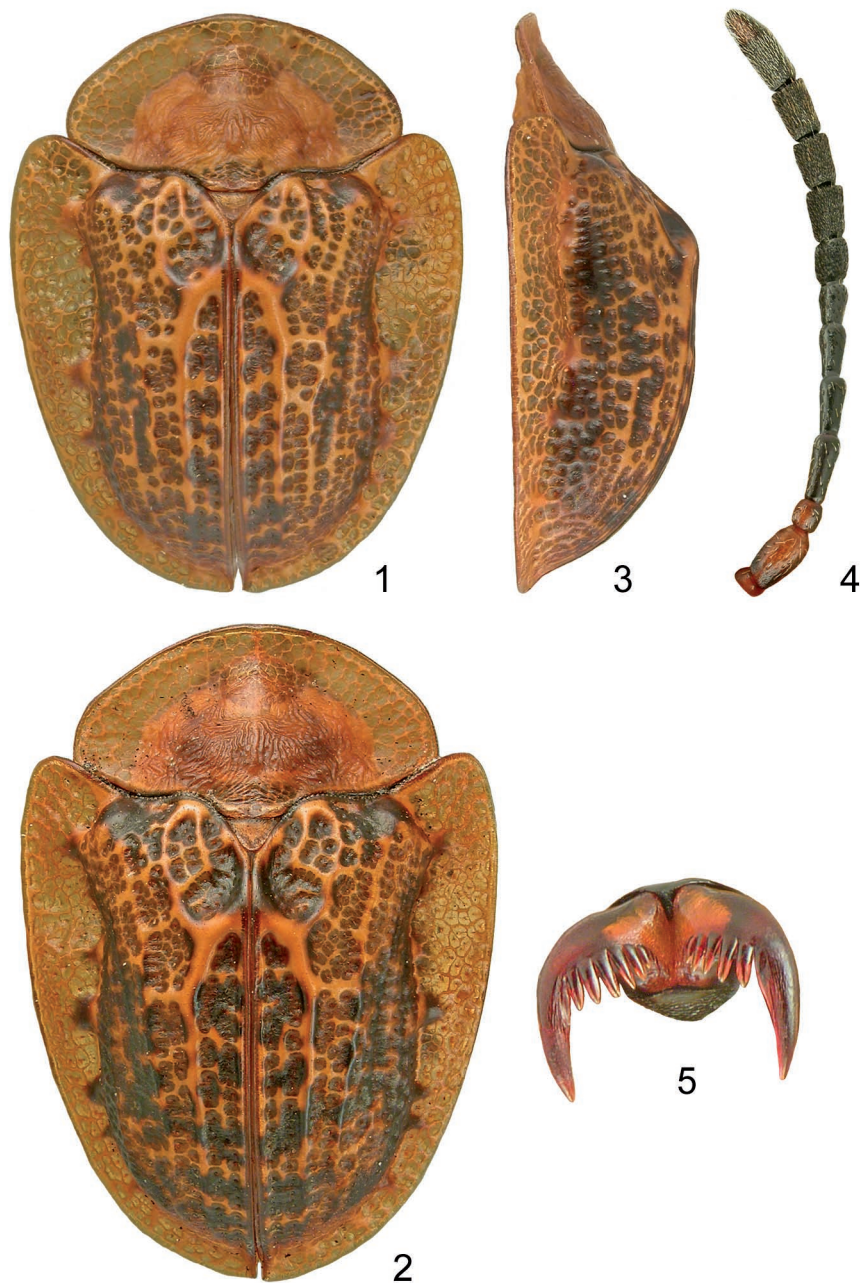
DIAGNOSIS

The new species belongs to the group of species with subtriangular body. Only three species of the group have elytra bicoloured, testaceous to brown with brown to black markings: *Laccoptera basalis* WEISE, 1899, *L. nigricornis* WAGENER, 1877 and *L. obscuromaculata* n. sp. In the first two species the pattern is black or dark brown and forms a large basal spot occupying basal 1/3 length of elytra and on sides extending to its half length (*L. basalis*) or forms elongate band from humerus to half length of elytra and spot on top of the postscutellar elevation (*L. nigricornis*), while in *L. obscuromaculata* pattern is brown and forms small, numerous, obscure spots spread over the space of elytral disc, on sides sometimes dark spots coalescent and form irregular band. *Laccoptera basalis* and *L. nigricornis* are distinctly smaller than *L. obscuromaculata* with body length below 9.1 mm, while in the new species the smallest specimens have length above 9.6 mm. Other *Orphnodella* species with testaceous to brown ground colour differ in elytra without pattern. *Laccoptera nunbergi* BOROWIEC, 1994 and *L. triangula* SPAETH, 1912 are the most similar, they have antennae like *L. obscuromaculata* with only two basal segments pale (in other species at least three basal segments are pale) and short pecten of tarsal claws extending to 1/4 length of claw (in other species the pecten is long, extending to 1/3-1/2 length of claw). Both differ in elytra immaculate, *L. triangula* differs also in humeral angles more protruding anterad and elytral costae less elevated, and *L. nunbergi* differs in more transverse pronotum with anterior margin straight or shallowly emarginate and in brown groundcolour of pronotum and elytra.

DESCRIPTION

Length: 9.70-11.05 mm (mean 10.20, n = 14), width 7.35-8.15 mm (mean 7.80, n = 14), width of pronotum 4.65-6.15 mm, length of pronotum 3.10-3.45 mm, length/width ratio 1.27-1.36, width/length ratio of pronotum 1.50-1.88. Males (fig. 1) smaller and stouter than females (fig. 2).

Pronotum testaceous. Elytra testaceous with numerous obscure spots. Most spots form areolae around elytral punctures, in the less maculate form except dark areoles occur only spots in postscutellar impression and on humeral calli, in the most maculate form obscure spots are partly coalescent and form large spots in postscutellar



1-5. *Laccoptera obscuromaculata* n. sp.: 1 – male dorsal, 2 – female dorsal, 3 – male lateral, 4 – antenna, 5 – tarsal claws

impression, in humeral area, in impressed intervals along suture and irregular band along sides of disc. Explanate margin of elytra immaculate. Head testaceous to brown, prosternum mostly dark brown to black but prosternal process usually partly brown or with testaceous spot. Meso- and metathorax mostly black, only lateral plates partly brown. Abdomen black, sternites on sides narrowly testaceous to brown. Legs black, sometimes coxa dark brown. Antennae mostly black, basal two segments usually yellowish-brown to brown, sometimes second segment almost black, third segment usually completely black or only on underside with small yellowish to brownish spot but never mostly pale.

Pronotum almost semicircular, widest at base. Disc moderately convex with more elevated basal and less elevated external parts. Elevated basal part covered with fine irregular striation, external parts of disc with surface from almost regular to covered with irregular folds but not appear rugose. Surface of explanate margin impunctate, regular. Whole surface of disc appears dull, opaque. Base of elytra distinctly wider than pronotum (figs. 1, 2), humeri moderately protruding anterad, rounded. Disc strongly convex, in profile with well marked postscutellar elevation (fig. 3). Elytral sculpture strong and high, postscutellar part with well marked postscutellar impressions and high H-shaped elevation. Second interval forms high longitudinal costa, fourth interval at least in the middle also forms thin costa. Punctuation coarse and dense, interspaces partly



6. *Laccoptera obscuromaculata* n. sp.: head

form short transverse folds but sides of disc appear almost regular to only slightly rugose. Explanate margin with large but shallow punctation, appears irregular. Impressed surface of disc dull, opaque, elevated parts partly shiny but dorsum appears rather dull than shiny. Epipleura in both sexes without pubescence.

Antennae long, typical for the subgenus *Orphnodella*, length ratio of antennal segments: 100:50:107:86:78:68:64:85:75:82:143, segment 3 approximately 2.2 times longer than segment 2, segment 10 1.6 times as long as wide (fig. 4).

Clypeus typical for the subgenus *Orphnodella*, clypeal plate forms elevated triangle with angulate anterior corner (fig. 6). Labrum narrowly emarginate to 1/5 length.

Fore claws on inner margin with pecten of 5-6 teeth, as long as 1/4 length of claw (fig. 5), on mid and hind tarsi pecten slightly shorter, as long as 1/5 length of claw.

REMARKS

In my key to African *Orphnodella* (BOROWIEC 1994) the new species runs to couplet 9. and the key is modified as follow:

- 9. Elytra bicoloured, testaceous with black or brown spots 10.
- Elytra unicoloured, testaceous, brown or black 11.
- 10. Dark pattern black or dark brown forms a large basal spot occupying basal 1/3 length of elytra and on sides extending to its half length or forms elongate band from humerus to half length of elytra and spot on top of the postscutellar elevation 10a.
- Dark pattern brown and forms small, numerous, obscure spots spread over the space of elytral disc, on sides sometimes dark spots coalescent and form irregular band *L. obscuromaculata* n. sp.
- 10a. Anterior half of elytral disc, including postscutellar elevation, black *L. basalis* WEISE
- Only band from humerus to half length of elytra, and postscutellar elevation black, area between the elevation and humerus testaceous *L. nigricornis* WAGENER

Colour photos of all subtriangular species of *Orphnodella* are available in BOROWIEC and ŚWIĘTOJAŃSKA (2010).

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